

REMARKS

Initially, the Applicants would like to express gratitude to Examiner Ajibade-Akonai for the time, attention, and effort in conducting the in-person interview concerning this case on July 9, 2009. The amendments and remarks presented herein are consistent with that discussion.

The Final Office Action mailed May 20, 2009 considered claims 10-24. Claims 10-16, and 19-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hakkinen, U.S. Patent No. 5,839,056 (filed Aug. 30, 1996) (hereinafter Hakkinen) in view of Keskitalo et al., U.S. Patent No. 5,570,353 (filed Jan. 11, 1995) (hereinafter Keskitalo). Claims 17, 18 and 24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hakkinen in view of Keskitalo and Jensen et al., U.S. Patent No. 5,671,219 (filed Jun. 7, 1995) (hereinafter Jensen).¹

By this response, claims 10, 11, 19, and 20 are amended and claims 10-24 remain pending. Support for the amendments may be found, *inter alia*, within Specification ¶¶ 0641 and 0646.² The amendments and remarks presented herein are consistent with those discussed in the interview on July 9, 2009.

Disclosure of References Cited

Hakkinen (US Patent 5839056) discloses improved closed loop power control, in which a base station measures the SIR and the power with respect to a signal received from a mobile station, and sends transmission power control commands CNT based on the measured SIR and power to the mobile station so that the mobile station controls its transmission power based on the power control commands CNT.

¹ Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

² Please note that the paragraph numbers are taken from the published application, U.S. Pat. Pub. No. 2004/0076125 (Apr. 22, 2004). It should also be noted that the present invention and claims as recited take support from the entire Specification. As such, no particular part of the Specification should be considered separately from the entirety of the Specification.

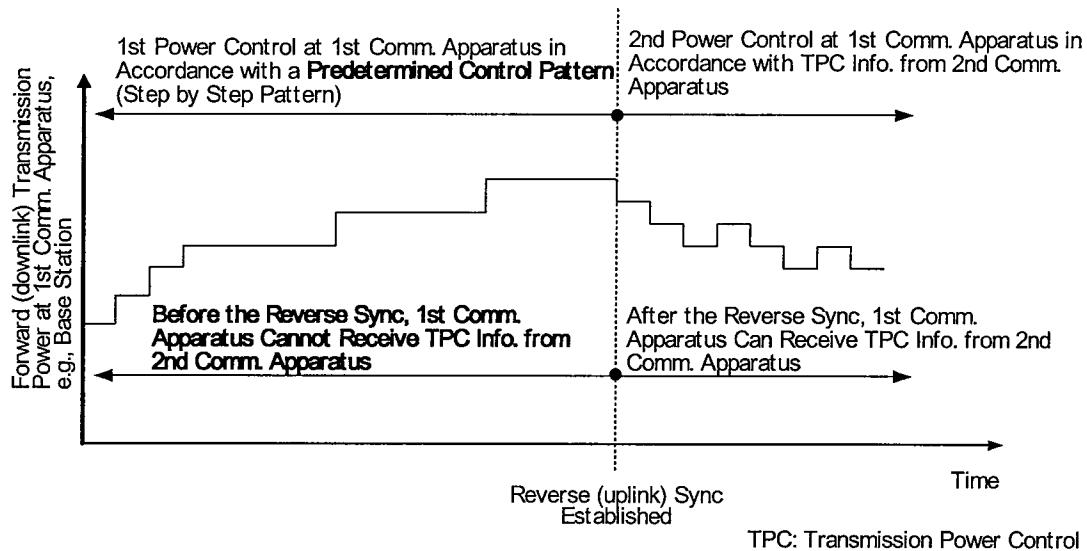
Keskitalo (US Patent 5570353) discloses, on column 1, lines 59-67, open loop power control, in which a station controls its transmission power in accordance with the strength of received signals measured at the station. Keskitalo also discloses, on column 2, lines 1-3, closed power control, in which the base station measures the strength of a signal received from the mobile station, and sends power control messages to the mobile station so that the mobile station controls its transmission power based on the power control messages.

Jensen (US Patent 5671219) discloses, on column 10, lines 59-67, that the base station 104 sends to a user station 102 a power control command for adjusting the power output level of the user station 102. In addition, the passage on column 20, lines 26-32 of Jensen disclose that the user station 102 and the base station 104 send a control pulse, i.e., the power control command 215.

Independent Claims 10, 11, 19, and 20

Independent claims 10, 11, 19 and 20 defines "before the (first) communication apparatus becomes able to receive the transmission power control information", the first control means (or step) of the (first) communication apparatus carries out transmission power control in accordance with a "**predetermined control pattern**". In addition, independent claims 10, 11, 19 and 20 defines "after the (first) communication apparatus becomes able to receive the transmission power control information", the second control means (or step) of the (first) communication apparatus carries out transmission power control in accordance with the transmission power control information (received from the another (second) communication apparatus.

The gist of independent claims 10, 11, 19 and 20 is illustrated as follows. This drawing is based on the upper part of Fig. 43 of the present application.



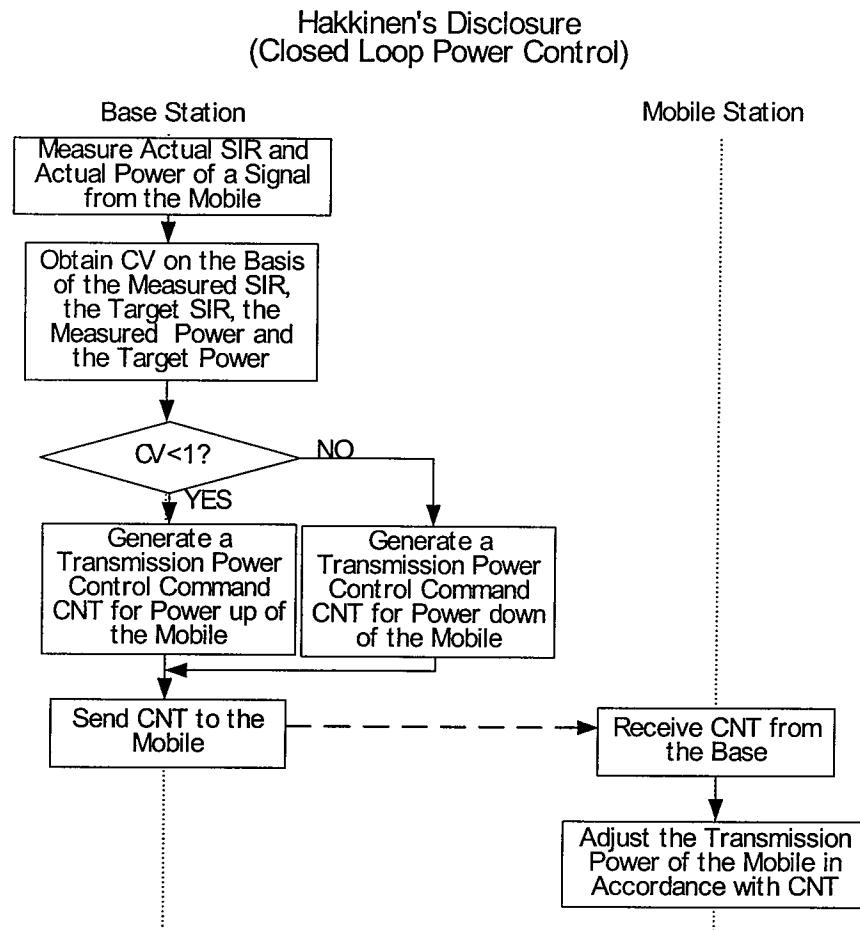
Thus, in independent claims 10, 11, 19 and 20, after the (first) communication apparatus becomes able to receive the transmission power control information, the (first) communication apparatus carries out transmission power control in accordance with the transmission power control information (in accordance with instructions by the another (second) communication apparatus). In other words, after the (first) communication apparatus becomes able to receive the transmission power control information, the (first) communication apparatus carries out transmission power control in accordance with closed loop power control.

However, *before* the (first) communication apparatus becomes able to receive the transmission power control information, the (first) communication apparatus carries out transmission power control in accordance with "**predetermined control pattern**" (**NOT DEPENDING ON INSTRUCTIONS BY ANOTHER (SECOND) COMMUNICATION APPARATUS**). It is believed that the above characteristics of the claims are apparent from the context of the claims.

In accordance with the discussions in the interview of July 9, 2009, claims 10, 11, 19, and 20 have been amended to particularly point out that the "predetermined control pattern" is a fixed pattern (to be distinguished from an algorithm or method for negotiation).

Please note that the "**predetermined control pattern**" in independent claims 10, 11, 19, and 20 and dependent claims 12 and 13 is different from the "**predetermined pattern**" in dependent claim 15 and 22, independent claims 17 and 24, and dependent claim 18 which will be apparent from comments described later. The "**predetermined control pattern**" in independent claims 10, 11, 19, and 20 and dependent claims 12 and 13 is a power control pattern determined in advance in the (first) communication apparatus and is independent of another (second communication apparatus.

The Examiner argues that Hakkinen (US Patent 5839056) discloses a first control means for performing the step of carrying out transmission power control in accordance with a predetermined control pattern (Fig. 2, column 5, lines 41-62, column 6, lines 1-16). However, the passage on column 5, lines 41-62 of Hakkinen merely states a process at the base station (the source of the transmission power control commands CN) for determining the transmission power control commands CNT destined for the mobile station. The passage on column 6, lines 1-16 of Hakkinen merely states a process at the mobile station (the destination of the transmission power control commands CNT) which has received the transmission power control commands CNT from the base station. Consequently, Hakkinen merely discloses improved closed loop power control, but does not suggest or disclose a process at the destination of the transmission power control commands for controlling its transmission power control before the destination apparatus can receive the transmission power control commands.



Contrary to the Examiner's argument, Hakkinen does not disclose a "**predetermined control pattern**" determined in advance in the (first) communication apparatus and is independent of another (second) communication apparatus. Dictionaries define the word "pattern" as "a consistent, characteristic form, style, or method" or "the regular way in which something happens, develops, or is done", so that "pattern" does not mean a mere method or a mere way.

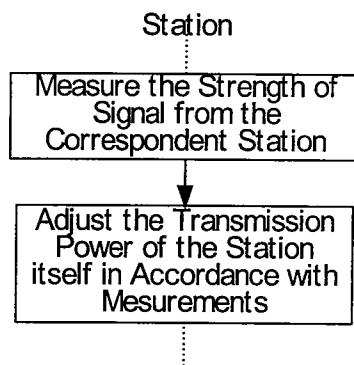
Furthermore, the claimed wording is limited by the adjective "**predetermined**". Dictionaries define the adjective "predetermined" as "determined, decided, or established in advance." In the closed loop power control stated in Hakkinen, the transmission power control commands CNT depend on the **SIR and power of received signals, which varies over time**. In the process of Hakkinen, if $CV < 1$, the base station instructs the mobile station to increase the

transmission power of the mobile station, whereas if $CV > 1$, the base station instructs the mobile station to decrease the transmission power of the mobile station. Therefore, the station receiving the transmission power control commands CNT cannot control its transmission power in accordance with a "**predetermined control pattern**" (consistent or regular control way determined in advance) determined in advance in the (first) communication apparatus and is independent of another (second communication apparatus).

The Examiner argues that the open loop power control disclosed on column 1, lines 59-67 of Keskitalo (US Patent 5570353) is related to the control pattern defined in independent claims 10, 11, 19 and 20 of the present application. However, dictionaries define the word "pattern" as "a consistent, characteristic form, style, or method" or "the regular way in which something happens, develops, or is done", so that "pattern" does not mean a mere method or a mere way.

Furthermore, the claimed wording is limited by the adjective "**predetermined**". Dictionaries define the adjective "predetermined" as "determined, decided, or established in advance". In the open loop power control stated in Keskitalo, a station controls its transmission power in accordance with **the strength of received signals, which varies over time**. Therefore, the station cannot control its transmission power in accordance with a "predetermined control pattern" (consistent or regular control way determined in advance) determined in advance in the (first) communication apparatus and is independent of another (second communication apparatus).

Keskitalo's Disclosure on Column 1 (Open Loop Power Control)

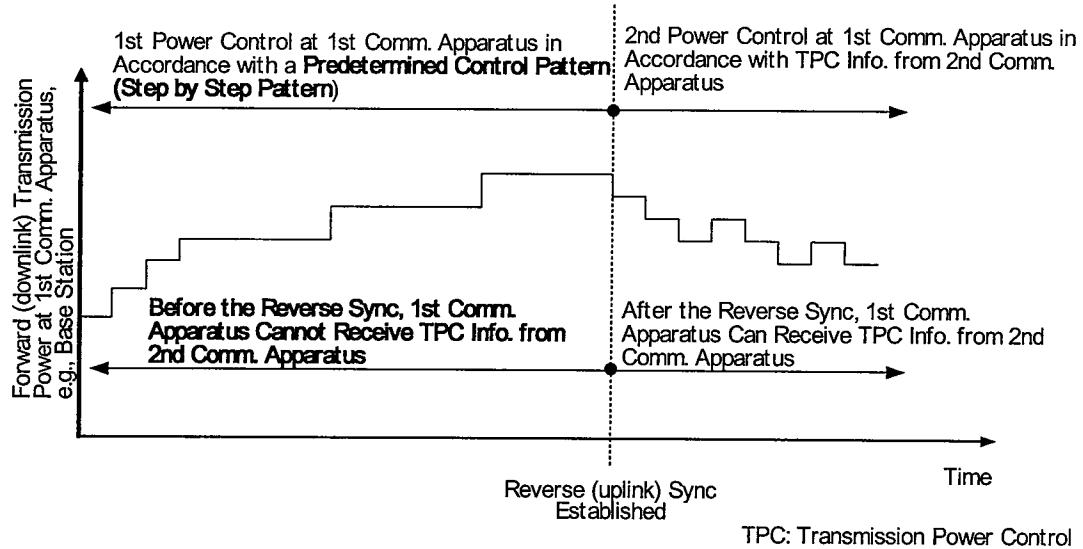


Thus, neither Hakkinen nor Keskitalo discloses that "before the (first) communication apparatus becomes able to receive the transmission power control information", the (first) communication apparatus control its transmission power in accordance with a "predetermined control pattern". Even if Hakkinen and Keskitalo were combined, the result could not reach the subject matter of independent claims 10, 11, 19 and 20.

Dependent claim 12

Further to the features in independent claim 11, claim 12 defines that the predetermined control pattern is a pattern for increasing transmission power step by step. The Examiner apparently did not fully consider the context of the claim and cherry-picks.

The gist of dependent claim 12 is illustrated as follows. This drawing is based on the upper part of Fig. 43 of the present application.



The Examiner argues that Hakkinen discloses the predetermined control pattern for increasing the transmission power step by step (increasing the power based on a power-up message applied based on determination of factor CV to be less than one ($CV < 1$), see column 5, lines 41-59). However, as described above, the process disclosed in Hakkinen is a process at the base station (the source of the transmission power control commands CNT) for determining the

transmission power control commands CNT destined for the mobile station. This is not related to a process at the destination of the transmission power control commands for controlling its transmission power control before the destination apparatus can receive the transmission power control commands.

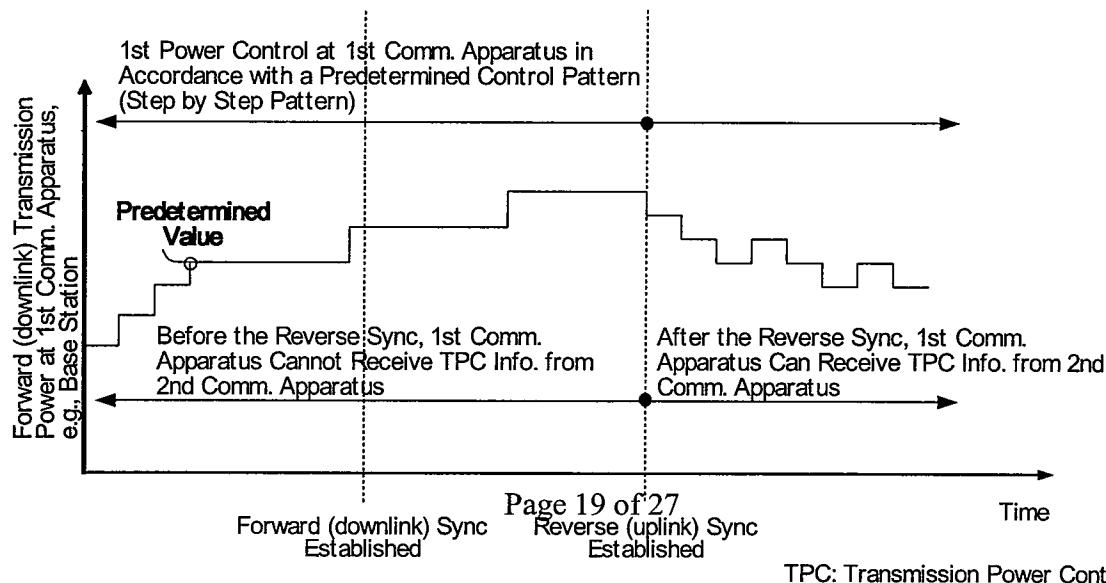
In addition, in the process of Hakkinen, if $CV < 1$, the base station instructs the mobile station to increase the transmission power of the mobile station, whereas if $CV > 1$, the base station instructs the mobile station to decrease the transmission power of the mobile station. The Hakkinen's process is not related to the claimed "**predetermined control pattern**" (consistent or regular control way determined in advance) determined in advance in the (first) communication apparatus and is independent of another (second communication apparatus).

Thus, no reference (or references combined) discloses claim 12.

Dependent Claim 13

Further to the features in dependent claim 12, claim 13 defines that the predetermined control pattern is a pattern for increasing the transmission power to a predetermined value, and subsequently, less rapidly increasing the transmission power. The Examiner ignores the context of the claim and cherry-picks.

The gist of dependent claim 13 is illustrated as follows. This drawing is based on the upper part of Fig. 43 of the present application.



As described above, the process disclosed in Hakkinen is a process at the base station (the source of the transmission power control commands CNT) for determining the transmission power control commands CNT destined for the mobile station. This is not related to a process at the destination of the transmission power control commands for controlling its transmission power control before the destination apparatus can receive the transmission power control commands.

In addition, in the process of Hakkinen, if $CV < 1$, the base station instructs the mobile station to increase the transmission power of the mobile station, whereas if $CV > 1$, the base station instructs the mobile station to decrease the transmission power of the mobile station. The Hakkinen's process is not related to the claimed "**predetermined control pattern**" (consistent or regular control way determined in advance) determined in advance in the (first) communication apparatus and is independent of another (second communication apparatus).

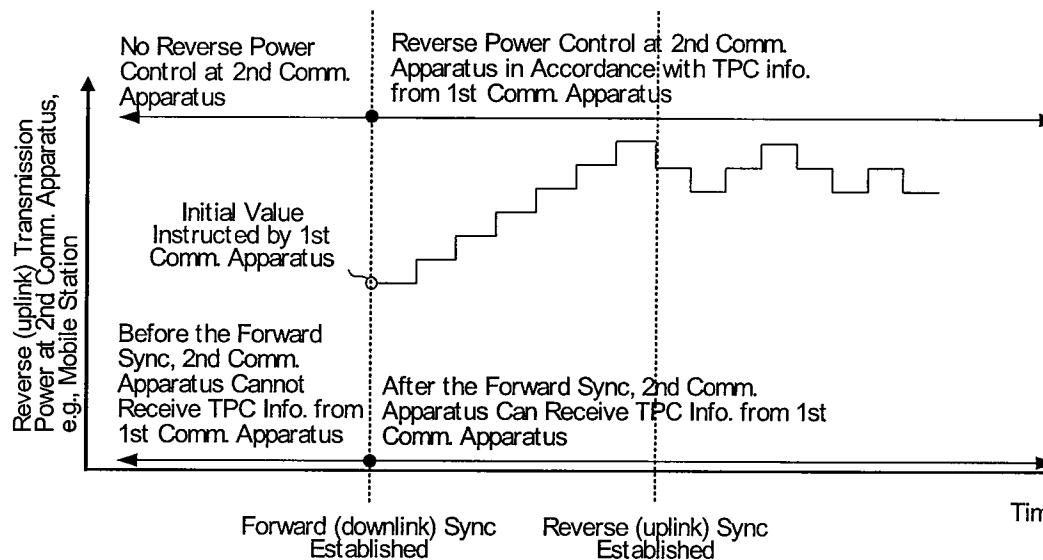
Thus, no reference discloses claim 13.

Independent Claims 14, 16, 21, and 23

Independent claims 14, 16, 21, and 23 defines that after the (second) communication apparatus becomes able to receive the transmission power control information, the control means (or step) of the (second) communication apparatus carries out transmission power control in accordance with the transmission power control information. In other words, after the (second) communication apparatus becomes able to receive the transmission power control information, the control means (or step) of the (second) communication apparatus carries out transmission power control in accordance with closed loop power control.

In addition, independent claims 14, 16, 21, and 23 defines that the control means (step) sets an **initial value** of transmission power in accordance with the information regarding the initial value of the transmission power and carries out the transmission power control, in which the information regarding the initial value is received from another apparatus.

The gist of independent claims 14, 16, 21, and 23 is illustrated as follows. This drawing is based on the lower part of Fig. 43 of the present application.



TPC: Transmission Power Control

The Examiner argues that Keskitalo discloses a mobile station comprising a second transmission means for performing the step of transmitting information regarding an initial value of transmission power of the second communication apparatus (mobile transmitting signal strength to the base station so that the base can measure the signal strength, column 2, lines 1-3); the second communication apparatus's second reception means performs the step of receiving the information regarding the initial value of the transmission power from the first communication apparatus (mobile transmitting signal strength to the base station so that the base can measure the signal strength, column 2, lines 1-3), and the control means performs the steps of setting a initial value of transmission power in accordance with the information regarding the initial value of the transmission power and carries out the transmission power control (base station performing closed loop power control, column 1, lines 59-67).

However, column 2 of Keskitalo discloses that the base station measures the strength of a signal received from the mobile station, and sends power control messages to the mobile station so that the mobile station controls its transmission power based on the power control messages.

This passage merely states closed loop power control, which is similar to the Hakkinen's disclosure. Keskitalo does not disclose or suggest the claimed "initial value". Keskitalo does not disclose or suggest the claimed "information regarding the initial value". The adjective "initial" means beginning or the first. Nobody can understand that Keskitalo discloses an "initial value" with which the closed loop power control starts.

In closed loop power control, as disclosed in the passages from column 1, lines 64 to column 2, line 5, and on column 2, line 26-33, a station measures the SIR with respect to a signal received from the correspondent station, and sends transmission power control information based on the measured SIR to the correspondent station. Although the transmission power control information instructs the correspondent station to raise or lower the transmission power of the correspondent station, the transmission power control information does not indicate the initial value of transmission power. According to general knowledge of those skilled in the art, information regarding the initial value of transmission power is not exchanged between stations. Therefore, the subject matter of claims 14, 16, 21, and 23 is novel.

If the Examiner deems that the signal strength is "information", this understanding is most peculiar. Dictionaries define the word "information" as "knowledge communicated or received concerning a particular fact or circumstance" or "the meaning given to data by the way it is interpreted". The signal strength measured at the receiver is not given any meaning by the sender.

Thus, neither Hakkinen nor Keskitalo discloses that the second transmission means for (step of) transmitting information regarding an initial value of transmission power of another (second) communication apparatus to the another (second) communication apparatus. Neither Hakkinen nor Keskitalo discloses the claimed second reception means (or step). Neither Hakkinen nor Keskitalo discloses that control means (step) sets an initial value of transmission power in accordance with the information regarding the initial value of the transmission power and carries out the transmission power control, in which the information regarding the initial value is received from another apparatus. Even if Hakkinen and Keskitalo were combined, the result could not reach the subject matter of independent claims 14, 16, 21, and 23.

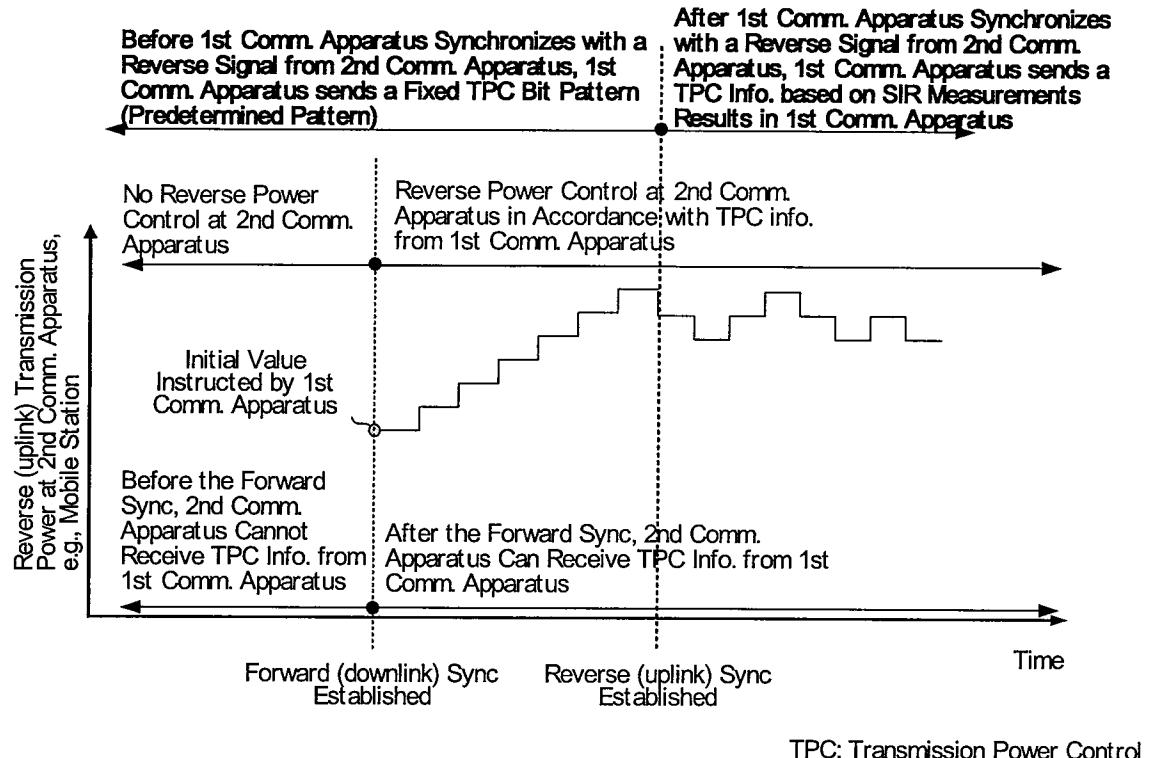
Dependent claim 15 and 22

Further to the features in independent claims 14 and 21, claims 15 and 22 define that the first transmission means (step) of the first communication apparatus transmits a predetermined pattern as the transmission power control information for controlling the transmission power of the second communication apparatus instead of the transmission power control information based on SIR measurement results before the first communication apparatus becomes able to synchronize with a signal from the second communication apparatus.

Consequently, before the first communication apparatus becomes able to synchronize with a signal from the second communication apparatus, the first transmission means (step) of the first communication apparatus transmits a predetermined pattern as the transmission power control information for controlling the transmission power of the second communication apparatus. Therefore, before the first communication apparatus becomes able to synchronize with a signal from the second communication apparatus, the first reception means (step) of the second communication apparatus receives the predetermined pattern as the transmission power control information, and the control means (step) of the second communication apparatus controls the transmission power in accordance with the predetermined pattern.

After the first communication apparatus becomes able to synchronize with a signal from the second communication apparatus, the first transmission means (step) of the first communication apparatus transmits transmission power control information which is based on SIR measurement results in the first communication apparatus to the second communication apparatus. After the first communication apparatus becomes able to synchronize with a signal from the second communication apparatus, the first reception means (step) of the second communication apparatus receives the transmission power control information which is based on SIR measurement results in the first communication apparatus from the first communication apparatus, and the control means (step) of the second communication apparatus controls the transmission power in accordance with the transmission power control information which is based on SIR measurement results.

The gist of dependent claim 15 and 22 is illustrated as follows. This drawing is based on the lower part of Fig. 43 of the present application.



Please note that the "predetermined pattern" in dependent claim 15 and 22, independent claims 17 and 24, and dependent claim 18 is different from the above-described "predetermined control pattern" in independent claims 10, 11, 19, and 20. The "predetermined pattern" in claims 15, 17, 18, 22, and 24 is a pattern of the transmission power control information transmitted from the first communication apparatus to the second communication apparatus.

Jensen (US Patent 5671219) discloses, on column 10, lines 59-67, that a the base station 104 sends to a user station 102 a power control command for adjusting the power output level of the user station 102. In addition, the passage on column 20, lines 26-32 of Jensen disclose that the user station 102 and the base station 104 send a control pulse, i.e., the power control command 215.

The Examiner argues that the passages on column 10, lines 59-67 and column 20, lines 26-32 of Jensen are related to claims 15 and 22. However, the Examiner's argument is completely incorrect. Jensen does not disclose change of scheme for power control before and after synchronization.

In addition, the claimed wording is "**predetermined pattern**". Dictionaries define the word "pattern" as "a consistent, characteristic form, style, or method" or "the regular way in which something happens, develops, or is done", so that "pattern" does not mean a mere method or a mere way. Furthermore, dictionaries define the adjective "predetermined" as "determined, decided, or established in advance". It is impossible to transmit "**predetermined pattern**" (consistent or regular way determined in advance) according to Jensen.

Thus, no reference discloses claim 15 or 22.

Independent Claims 17 and 24

The comments described above in conjunction with independent claims 14, 16, 21, and 23 can also be applied for claims 17 and 24. Thus, neither Hakkinen nor Keskitalo discloses that the second transmission means for (step of) transmitting information regarding an **initial value** of transmission power of another (second) communication apparatus to the another (second) communication apparatus.

The comments described above in conjunction with dependent claim 15 and 22 can also be applied for claims 17 and 24. Thus, no reference discloses transmitting a **predetermined pattern** as transmission power control information for controlling the transmission power of the another (second) communication apparatus instead of the transmission power control information based on SIR measurement results before said (first) communication apparatus becomes able to synchronize with a signal from said another (second) communication apparatus.

Dependent Claim 18

The Examiner argues that Hakkinen discloses means for varying the predetermined pattern (Fig. 3, column 6, lines 49-67, column 7, lines 1-25). However, although these passages are related to transmission power control information based on SIR measurement results, they are not related to the claimed "**predetermined pattern**".

Concerning independent claim 17 on which claim 18 depends, the Examiner has stated that Hakkinen as modified by Keskitalo does not disclose the first transmission means transmits a predetermined pattern. It is not understandable that Hakkinen can disclose means for varying the "**predetermined pattern**". The Examiner's argument is self-contradictory. Actually, no reference disclose claim 18.

In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In accordance with the amendments and discussion presented herein, the Applicants respectfully request favorable reconsideration of each of the pending claims. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at 801-533-9800.

Dated this 17th day of July, 2009.

Respectfully submitted,



THOMAS M. BONACCI
Registration No. 63,368
Attorney for Applicants
Customer No. 022913

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